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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|---------------|--------------------------|-------------------------|------------------|
| 10/020,653 | 10/30/2001 | Harold Randolph Anderson | 0523-1-1 | 1045 |
| 75 | 90 08/13/2003 | | | |
| Jason A. Bernstein BRENSTEIN & ASSOCIATES, P.C. Embassy Row 400, Suite 495 6600 Peachtree Dunwoody Road, N.E. Atlanta, GA 30328-1649 | | EXAMINER | | |
| | | | LITHGOW, THOMAS M | |
| | | | ART UNIT | PAPER NUMBER |
| | | • | 1724 | |
| | | | DATE MAILED: 08/13/2003 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|---|--|---|--|--|--|--|
| | 10/020,653 | ANDERSON ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Thomas M. Lithgow | 1724 | | | | |
| The MAILING DATE of this communication ap Period for Reply | pears on the cover sheet with the o | correspondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a rep - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statut - Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b). | 136(a). In no event, however, may a reply be tingly within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a, cause the application to become ABANDONE | nely filed rs will be considered timely. It he mailing date of this communication. CD (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on | | | | | | |
| , | nis action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>1-32</u> is/are pending in the application | n | | | | | |
| 4a) Of the above claim(s) <u>none</u> is/are withdraw | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-24 and 28-32</u> is/are rejected. | | | | | | |
| 7) ☐ Claim(s) <u>7-24 and 20-32</u> is/are rejected. | | , | | | | |
| 8) Claim(s) 23-27 Israte objected to: 8) Claim(s) are subject to restriction and/o | or election requirement | | | | | |
| Application Papers | or election requirement. | | | | | |
| 9)☐ The specification is objected to by the Examine | er. | | | | | |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the | · | | | | | |
| 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. | | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | • | | | | |
| 13) Acknowledgment is made of a claim for foreig | n priority under 35 U.S.C. § 119(a | n)-(d) or (f) | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | |
| 1. Certified copies of the priority document | ts have been received. | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the prio application from the International Bu * See the attached detailed Office action for a list | ıreau (PCT Rule 17.2(a)). | | | | | |
| 14)⊠ Acknowledgment is made of a claim for domest | ic priority under 35 U.S.C. § 119(| e) (to a provisional application). | | | | |
| a) ☐ The translation of the foreign language provisional application has been received. 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | | |
| Attachment(s) | | | | | | |
| Notice of References Cited (PTO-892) Discrete Draftsperson's Patent Drawing Review (PTO-948) | 5) Notice of Informal i | (PTO-413) Paper No(s) Patent Application (PTO-152) | | | | |
| 3) ☑ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ≥ | (2. 6) ☐ Other: | 1- Sotto | | | | |
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DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35
 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Manillo (US 5787537). Manillo '537 discloses a method for recycling laundry water which has a zero discharge (for water) as noted at col. 5, lines 1-5. Basically the Mannillo process is 100% recycle which meets the recitation of claim 2.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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4. Claims 1, 15, 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manillo (US 5787537) in view of Pattee (US 6010621) and Thomas (US 4211652). Manillo '537 discloses a process for reclaiming waste water from a laundry operation and includes many unit operations including tanks, lint filter 20, sand filter 300, activated carbon filter 250, ozone generator 230, and a uv source 410 with pumps for controlling the process flows. Manillo lacks a "multimedia" filter and a clay filter. In Pattee '621, a process for the purification and recycling of laundry water is disclosed in which the organics are removed in a two step process including a clay filter 130 upstream of an activated carbon (AC) filter 140. This arrangement allows the AC filter to last longer as the clay filter removes an initial portion of the organics. To add a clay filter to the Manillo '537 process ahead of the AC filter (250) would have been obvious in view of the benefit of longer use times without backwashing (BW). Similarly, Manillo '537 employs a sand filter (300) – a single media filter to remove additional solids from the laundry waste water that the lint filter and flotation missed. Thomas '652 discloses that a multimedia filter 60 (anthracite over silica sand over garnet) is beneficial to removing solids from a laundry waste water stream subsequent to a flotation operation. Generally such

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multimedia beds are much better at solids removals than it single media relative (sand filters) albeit at a higher capital cost. It would have been obvious to employ the more efficient multimedia filter of Thomas '652 for the single media (sand) filter of Manillo '537.

- Claims 3,5,7-12 and 14 are rejected under 35 U.S.C. 103(a) as being 5. unpatentable over Manillo (US 5787537) in view of Thomas (US 4211652). As above, the use f the more efficient multimedia filter of Thomas "652 for the single media sand filter of Manillo in the reclamation of laundry waste water would have been obvious to one of ordinary skill in the art.
- 6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Manillo (US 5787537) as applied to claim 3 above, and further in view of Pattee (US 6010621). As noted before the use of a clay filter ahead of the AC filter (Pattee '621) is known to prolong the life of the AC filter and to use the more advanced two step process for organics removal from laundry waste water instead of the one step AC filter of Manillo would have been obvious to one of ordinary skill in the art.
- 7. Claims 4 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claims 3 and 15 respectively above, and further in view of either one of Lahti (US 5807487) or Sharkey

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(US 5350526). Either one of the two secondary patents disclose the use of a pressure bag filter for the removal of lint from a wash machine (laundry) operation. To use such a bag filter in place of the functionally equivalent lint filter 20 of Manillo '537 would have been obvious to one of ordinary skill in the art at the time of the invention.

- 8. Claims 6 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claims 3 and 15 respectively above, and further in view of Smith (US 3738126). The use of a grooved spinning plate as a lint filter for the discharge of a washing machine is disclosed by Smith '126. To use the functionally equivalent disk filter for the lint filter of Manillo '537 would have been obvious to one of ordinary skill in the art.
- 9. Claims 1,3,5,7,11-13,20,22,24,and 28-32 rejected under 35 U.S.C. 103(a) as being unpatentable over Pattee (US 6010621) further in view of Manillo (US 5787537). The use of a UV disinfecting step at the end of the laundry water recycling process to kill any remaining bacteria would have been obvious to one of ordinary skill in the art.
- 10. Claims 4 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art (Pattee '621) as applied to claims 3 and 20

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respectively above, and further in view of either one of Lahti '487 or Sharkey '526. As noted above, the use of bag filters for a lint trap is well known.

11. Claims 6 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art (Pattee'621) as applied to claims 3 and 20 above, and further in view of Smith '126. As noted above, the use of a spinning disc as a lint filter is well known.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas M. Lithgow whose telephone number is 703-308-0173. The examiner can normally be reached on Mon. -Fri...

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blain Copenheaver can be reached on 703-308-1261. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3602 for regular communications and 305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

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Thomas M. Lithgow Primary Examiner Art Unit 1724

TML August 8, 2003